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NEWS 6	APR 26	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS 7	APR 28	CAS patent authority coverage expanded
NEWS 8	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 9	APR 28	Limits doubled for structure searching in CAS REGISTRY
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NEWS 14	MAY 15	INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
NEWS 15	MAY 28	CAS databases on STN enhanced with NANO super role in records back to 1992
NEWS 16	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN

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AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009

=> file caplus
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FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009
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FILE COVERS 1907 - 5 Jun 2009 VOL 150 ISS 24
FILE LAST UPDATED: 4 Jun 2009 (20090604/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate

=> s chlorocarbonyl (s) (pentanoate or hexanoate or octanoate or nonanoate or decanoate)

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          2148 CHLOROCARBONYL
            15 CHLOROCARBONYLS
          2155 CHLOROCARBONYL
                 (CHLOROCARBONYL OR CHLOROCARBONYLS)
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
          7084 HEXANOATE
           140 HEXANOATES
          7168 HEXANOATE
                 (HEXANOATE OR HEXANOATES)
         10872 OCTANOATE
           171 OCTANOATES
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        10950 OCTANOATE
              (OCTANOATE OR OCTANOATES)
         1879 NONANOATE
           31 NONANOATES
         1898 NONANOATE
              (NONANOATE OR NONANOATES)
         4663 DECANOATE
           68 DECANOATES
         4694 DECANOATE
              (DECANOATE OR DECANOATES)
L1          5 CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONA
              NOATE OR DECANOATE)

=> d l1 1-5 ibib abs

L1   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2002:31403  CAPLUS
DOCUMENT NUMBER:          136:102126
TITLE:                    Cyclopentyl-substituted glutaramide derivatives as
                          inhibitors of neutral endopeptidase, and their
                          preparation and use in the treatment of female sexual
                          arousal disorder
INVENTOR(S):              Barber, Christopher Gordon; Cook, Andrew Simon; Maw,
                          Graham Nigel; Pryde, David Cameron; Stobie, Alan
PATENT ASSIGNEE(S):       Pfizer Limited, UK; Pfizer Inc.
SOURCE:                   PCT Int. Appl., 169 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   10
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     WO 2002002513        A1    20020110    WO 2001-IB1205         20010702
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 20020052370       A1    20020502    US 2001-893585         20010628
     CA 2414881           A1    20020110    CA 2001-2414881        20010702
     AU 2001067770        A     20020114    AU 2001-67770          20010702
     EP 1296938           A1    20030402    EP 2001-945557         20010702
          R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     BR 2001012370        A     20030617    BR 2001-12370          20010702
     HU 2003001683        A2    20030929    HU 2003-1683           20010702
     HU 2003001683        A3    20041129
     JP 2004502670        T     20040129    JP 2002-507770         20010702
     NZ 522368            A     20041224    NZ 2001-522368         20010702
     BG 107229            A     20030530    BG 2002-107229         20021029
     IN 2002MN01551       A     20041211    IN 2002-MN1551         20021105
```

MX 2003000066	A	20031015	MX 2003-66		20021219
ZA 2003000121	A	20040121	ZA 2003-121		20030106
ZA 2003000120	A	20040126	ZA 2003-120		20030106
US 20060041014	A1	20060223	US 2005-170397		20050628
PRIORITY APPLN. INFO.:			GB 2000-16684	A	20000706
			GB 2001-1584	A	20010122
			US 2000-219100P	P	20000718
			GB 2000-30647	A	20001215
			US 2001-265358P	P	20010131
			US 2001-274957P	P	20010312
			GB 2001-6167	A	20010313
			GB 2001-8483	A	20010404
			US 2001-895367	A3	20010629
			WO 2001-IB1205	W	20010702

OTHER SOURCE(S): MARPAT 136:102126
GI

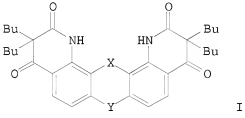
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention provides compds. I [wherein: R1 = (un)substituted alkyl, cycloalkyl, aryl, heterocyclyl, alkoxy, amino derivative, or sulfonylamino derivative; n = 0, 1, or 2; Y = (un)substituted cycloalkyl, carbamoyl, 2-indenyl, aza- or diazainden-2-yl, 5- to 7-membered heterocyclyl, or sulfonylamino; with provisos] and their pharmaceutically acceptable salts, solvates, polymorphs, or prodrugs. I are inhibitors of neutral endopeptidase (NEP), and as such are useful for treating a variety of conditions. In particular, the compds. are useful for treatment of female sexual dysfunction, and especially female sexual arousal disorder (FSAD). Almost 60 synthetic examples and over 100 precursor prepns. are given. For instance, 1-[2-(tert-butoxycarbonyl)-4-pentenyl]cyclopentanecarboxylic acid was hydrogenated at the double bond (91%), amidated with piperonylamine using EDCI and HOBT, and deprotected with TFA, to give title compound II. The example compds. inhibited NEP in vitro with IC50 < 5000 nM, with many compds. showing at least 300-fold selectivity for NEP over angiotensin converting enzyme (ACE). An animal model of human female sexual arousal was developed, using laser doppler technol. to record small changes in vaginal and clitoral blood flow induced by pelvic nerve stimulation or vasoactive neurotransmitters in anesthetized rabbits. In this model, invention compound III significantly enhanced pelvic nerve-stimulated increases in genital blood flow at clin. relevant doses, using both i.v. and topical (vaginal) application.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:275753 CAPLUS
DOCUMENT NUMBER: 127:4900
ORIGINAL REFERENCE NO.: 127:1117a,1120a
TITLE: Adipoylation of 2-methoxynaphthalene
AUTHOR(S): Balo, C.; Fernandez, F.; Lens, E.; Lopez, C.
CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Farmacia, Santiago de Compostela, 15706, Spain
SOURCE: Organic Preparations and Procedures International (1997), 29(2), 201-205

CODEN: OPPIAK; ISSN: 0030-4948
PUBLISHER: Organic Preparations and Procedures, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 127:4900
AB The title reaction in dichloromethane, nitrobenzene and a mixture of these 2 solvents, using Me 5-(chlorocarbonyl)pentanoate (2) in the presence of aluminum chloride gave Me 6-(6-methoxy-2-naphthyl)-6-oxohexanoate as the major product. Unreacted 2-methoxynaphthalene was isolated along with monomethyl adipate (the hydrolysis product of 2), and 2 side-products, Me 6-(2-methoxy-1-naphthyl)-6-oxohexanoate and, in some cases Me 6,6-bis(6-methoxy-2-naphthyl)-5-hexenoate.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:607929 CAPLUS
DOCUMENT NUMBER: 115:207929
ORIGINAL REFERENCE NO.: 115:35481a,35484a
TITLE: Three complexing agents for ureas and formamides
AUTHOR(S): Crego, Mercedes; Marugan, J. Jose; Raposo, Cesar; Sanz, Maria Jose; Alcazer, Victoria; Cruz Caballero, Maria; Moran, Joaquin R.
CORPORATE SOURCE: Dep. Org. Chem., Univ. Salamanca, Salamanca, 37008, Spain
SOURCE: Tetrahedron Letters (1991), 32(33), 4185-8
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Three cleft type hydrogen bonding receptors I (X = Y = CH2; X = O, S, Y = CO) were prepared, with slightly different geometries due to the presence of either methylene, oxygen, or sulfur. All 3 are able to complex urea, however, I (X = Y = CH2) is the best. Benzylformamide assocs. more strongly with I (X = O), probably due to its smaller cleft.

L1 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:121922 CAPLUS
DOCUMENT NUMBER: 114:121922
ORIGINAL REFERENCE NO.: 114:20760h,20761a
TITLE: Alternative syntheses of pyrrole-3-alkanols. Application to the synthesis of some functionalized pyrroles

AUTHOR(S): Andrieux, C. P.; Audebert, P.; Merz, A.; Schwarz, R.
CORPORATE SOURCE: Lab. Electrochim. Mol., Univ. Paris, Paris, 75251, Fr.
SOURCE: New Journal of Chemistry (1990), 14(8-9), 637-40
CODEN: NJCHE5; ISSN: 1144-0546
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:121922
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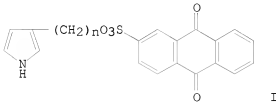

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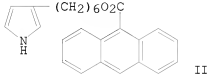

II

AB A new alternative synthesis of 1-(pyrrol-3-yl)-n-alkan-ω-ols (n = 6) is described which opens a route towards 3-functionalized pyrroles for modified electrodes. Syntheses of 3-functionalized pyrroles I (n = 5, 6) and II are also presented as a related application.

L1 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1983:407039 CAPLUS
DOCUMENT NUMBER: 99:7039
ORIGINAL REFERENCE NO.: 99:1245a,1248a
TITLE: The chemistry of paper wet-strength. IV. Exploration of synthetic routes to a ketene dimer-containing model polymer
AUTHOR(S): Westfelt, Aina; Westfelt, Lars
CORPORATE SOURCE: Swed. For. Prod. Res. Lab., Stockholm, S-114 86, Swed.
SOURCE: Cellulose Chemistry and Technology (1983), 17(1), 49-54
CODEN: CECTAH; ISSN: 0576-9787
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The reaction of ethylene-vinyl alc. copolymer 5-(chlorocarbonyl) pentanoate with propionyl chloride, 2-butanol with propionyl chloride and methylketene dimer (I), 2,4-pentanediol with butanal and I, and Et 3-(vinylsulfonyl)isovalerate with I and Et2NH or pyrrolidine was studied to choose the synthetic routes in the preparation of ketene dimer group-containing poly(vinyl alc.) (methylpyrrolidinio)butyrates as wet strengthening agents for paper.

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=> d his

     (FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

     FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009
L1             5 S CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N

=> s process (L) (chlorocarbolyl (2w) pentanoate)
       2806188 PROCESS
       1941310 PROCESSES
       4201487 PROCESS
                 (PROCESS OR PROCESSES)
             0 CHLOROCARBOLYL
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
L2            0 PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)

=> s prepare (L) (chlorocarbonyl (s) pentanoate)
         12836 PREPARE
          2925 PREPARES
         15689 PREPARE
                 (PREPARE OR PREPARES)
        148154 PREP
          2520 PREPS
        150443 PREP
                 (PREP OR PREPS)
        164250 PREPARE
                 (PREPARE OR PREP)
          2148 CHLOROCARBONYL
            15 CHLOROCARBONYLS
          2155 CHLOROCARBONYL
                 (CHLOROCARBONYL OR CHLOROCARBONYLS)
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
L3            0 PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)

=> s chloro (s) (pentanoate or hexanoate or octanoate or nonanoate or decanoate)
        371434 CHLORO
            16 CHLOROS
        371445 CHLORO
                 (CHLORO OR CHLOROS)
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
          7084 HEXANOATE
           140 HEXANOATES
          7168 HEXANOATE
                 (HEXANOATE OR HEXANOATES)
         10872 OCTANOATE
           171 OCTANOATES
         10950 OCTANOATE
                 (OCTANOATE OR OCTANOATES)
```

```
          1879 NONANOATE
            31 NONANOATES
          1898 NONANOATE
                 (NONANOATE OR NONANOATES)
          4663 DECANOATE
            68 DECANOATES
          4694 DECANOATE
                 (DECANOATE OR DECANOATES)
L4         122 CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
               OR DECANOATE)

=> s l4 and phosgene
         14253 PHOSGENE
            44 PHOSGENES
         14265 PHOSGENE
                 (PHOSGENE OR PHOSGENES)
L5           0 L4 AND PHOSGENE

=> s phosgene (L)  (pentanoate or hexanoate or octanoate or nonanoate or decanoate)
         14253 PHOSGENE
            44 PHOSGENES
         14265 PHOSGENE
                 (PHOSGENE OR PHOSGENES)
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
          7084 HEXANOATE
           140 HEXANOATES
          7168 HEXANOATE
                 (HEXANOATE OR HEXANOATES)
         10872 OCTANOATE
           171 OCTANOATES
         10950 OCTANOATE
                 (OCTANOATE OR OCTANOATES)
          1879 NONANOATE
            31 NONANOATES
          1898 NONANOATE
                 (NONANOATE OR NONANOATES)
          4663 DECANOATE
            68 DECANOATES
          4694 DECANOATE
                 (DECANOATE OR DECANOATES)
L6           10 PHOSGENE (L)  (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
                OR DECANOATE)

=> d l6 1-10 ibib abs

L6   ANSWER 1 OF 10  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2008:997697  CAPLUS
DOCUMENT NUMBER:          149:308070
TITLE:                    Chlorinating method in the sucralose production
INVENTOR(S):              Jiang, Jiancheng; Rong, Xiandong
PATENT ASSIGNEE(S):       Peop. Rep. China
SOURCE:                   Faming Zhuanli Shenqing Gongkai Shuomingshu, 7pp.
                          CODEN: CNXXEV
DOCUMENT TYPE:            Patent
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LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101239997	A	20080813	CN 2008-10019895	20080321
PRIORITY APPLN. INFO.:			CN 2008-10019895	20080321

AB The title chlorinating method comprises adding DMF in reactor, dropping chlorinating agent at normal temperature with chlorinating agent: DMF = 1 : 2.5-7.5(mol:mol), stirring for 1-2 h, dropping sucrose-6-acetate, gradually heating to ≤ 115°C under incubating at 80°C, 100°C and 113°C for 1, 1-1.5 h and 2-2.5 h resp., dropping concentrated NaOH or NaCO3 or ammonia to neutralize, carrying out posttreatment, batch adding organic solvent, extracting, treating organic phase, refining to obtain sucralose 6-acetate. Chlorinating agent is thionyl chloride or phosgene or phosphorus pentachloride or phosphorus oxychloride. Organic solvent is Et formate, Et acetate, isoamyl acetate, Et pentanoate or chloroform. The inventive method has advantages of mild reaction condition, easy and controllable operation, low energy consumption.

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1290255 CAPLUS
DOCUMENT NUMBER: 144:23557
TITLE: Aliphatic polyester copolymers with good heat resistance and mechanical and melting properties
INVENTOR(S): Terado, Yuji; Wada, Masaru; Urakami, Tatsuhiro
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116110	A1	20051208	WO 2005-JP9519	20050525
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1752482	A1	20070214	EP 2005-743688	20050525
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1989173	A	20070627	CN 2005-80024916	20050525
IN 2006DN07143	A	20070824	IN 2006-DN7143	20061128

US 20080015331	A1	20080117	US 2006-597931	20061129
KR 2007030804	A	20070316	KR 2006-725198	20061130
KR 763987	B1	20071008		

PRIORITY APPLN. INFO.: JP 2004-160392 A 20040531
WO 2005-JP9519 W 20050525

AB Title polyester copolymers contain an aliphatic polycarbonate unit and an aliphatic polyester unit. Thus, 106.12 g isosorbide and 74.02 g phosgene were polymerized to give a polycarbonate with Mw 19,000 and glass transition temperature 163.1°, 12.00 g of which was mixed with 18.06 g Lacea H 100 and 91.22 g 1,3-dimethyl-2-imidazolidinone, heated at 140°, 0.5552 g tin octanoate was added therein and reacted at 140° for 23 h to give a copolymer with Mw 8800 and glass transition temperature 82.7°.

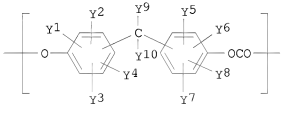
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:733086 CAPLUS
DOCUMENT NUMBER: 133:282503
TITLE: Polycarbonates with improved sliding property, and their manufacture
INVENTOR(S): Kato, Satoshi; Nukii, Masahiro
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000290357	A	20001017	JP 1999-100052	19990407
JP 3704251	B2	20051012		

PRIORITY APPLN. INFO.: JP 1999-100052 19990407

GI



I

AB The polycarbonates, useful as binders for electrophotog. photoreceptors, contain structural units I [Y1-Y8 = H, C1-10 saturated aliphatic hydrocarbyl; C3-10 unsatd. aliphatic hydrocarbyl, halo, haloalkyl, alkoxy, C6-20 (substituted) aromatic hydrocarbyl; Y9, Y10 = organic group containing carboxylic acid C≥4 aliphatic alc. ester group, C1-10 saturated aliphatic hydrocarbyl; C3-10 unsatd. hydrocarbyl, halo, haloalkyl, alkoxy, C6-20 aromatic hydrocarbyl; Y9 and/or Y10 = the ester group-containing organic group]. Thus, a

CH2Cl2 solution of bisphenol C-COCl2 oligomer, a CH2Cl2 solution of bisphenol P-COCl2 oligomer, a CH2Cl2 solution of octadecyl 4,4-bis(4-hydroxyphenyl)pentanoate, and 4-tert-butylphenol were mixed and polymerized to give copolycarbonate (II). A photoreceptor containing II as a binder showed dynamic friction coefficient (against urethane rubber) 0.33.

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:323502 CAPLUS
DOCUMENT NUMBER: 129:4956
ORIGINAL REFERENCE NO.: 129:1181a,1184a
TITLE: Thermogravimetric analysis of poly(ester carbonate)s and poly(ester thiocarbonate)s with the ester group in the side chain
AUTHOR(S): Tagle, L. H.; Diaz, F. R.
CORPORATE SOURCE: Organic Chemistry Department, Faculty Chemistry, Catholic University Chile, Santiago, Chile
SOURCE: International Journal of Polymeric Materials (1998), 40(1-2), 17-27
CODEN: IJPMCS; ISSN: 0091-4037
PUBLISHER: Gordon & Breach Science Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thermogravimetric anal. of poly(ester carbonate)s and poly(ester thiocarbonate)s with the ester group in the side chain, and derived from the diphenols: Me and Et 2,2-bis(4-hydroxyphenyl)propanoate, Me and Et 3,3-bis(4-hydroxyphenyl)butanoate, Me and Et 4,4-bis(4-hydroxyphenyl) pentanoate with phosgene or thiophosgene, were carried out by dynamic thermogravimetry. The thermal decomposition temps. were determined, showing that polymers derived from the diphenols Me and Et 2,2-bis(4-hydroxyphenyl)propanoate were more stable than the others. The kinetic parameters, activation energy, reaction order, and pre-exponential factor, were determined using the Arrhenius relationship.

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1981:604886 CAPLUS
DOCUMENT NUMBER: 95:204886
ORIGINAL REFERENCE NO.: 95:34253a,34256a
TITLE: Heat-resistant resin electric insulators
PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56090825	A	19810723	JP 1979-167872	19791224
JP 63033493	B	19880705		

PRIORITY APPLN. INFO.: JP 1979-167872 A 19791224
AB Compns. of polymaleimido compds., polycyanato compds., and halogenated polycarbonate oligomers are useful as fire-resistant thermosetting resins for elec. insulators. Thus, a mixture of 900 g bis(4-maleimidophenyl)methane and 900 g bis(4-cyanotophenyl)ether was heated 120 min at 150° to form prepolymer [79729-16-1], formulated

with 4,4'-isopropylidenebis(2,6-dibromophenol)-phosgene copolymer 2,4,6-tribromophenyl ester (I) [76724-44-2] (d.p. 4.2) 1700, ECN 1273 2000, Zn octanoate 3, and triethylenediamine 3 g, applied to glass cloths, and heated to give prepregs. A pile of 8 of those prepregs sandwiched with 2 35-μ Cu foils was pressed 150 min at 175° and 40 kg/cm2 to give a laminate having peel strength of Cu foil 1.60, 1.40, and 1.10 kg/cm at 25, 150, and 250°, resp., and fire-resistance rating (UL 94) V 0 and V 0 before and after 90 h of heating at 150°, resp., compared with 1.50, 1.15, 0.90, V 0, and V 1, resp., for a similar laminate containing bis(pentabromophenyl) ether in place of I.

L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1981:48364 CAPLUS
DOCUMENT NUMBER: 94:48364
ORIGINAL REFERENCE NO.: 94:7905a,7908a
TITLE: Polycarbonate having improved hydrolytic stability
INVENTOR(S): Sivaramakrishnan, Parameswar
PATENT ASSIGNEE(S): Mobay Chemical Corp., USA
SOURCE: Can., 22 pp.
CODEN: CAXXA4
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1089144	A1	19801104	CA 1976-269031	19761231
PRIORITY APPLN. INFO.:			US 1976-659316 A	19760219

AB The hydrolytic stability of polycarbonates is greatly improved by addition of Cd carboxylates. Thus, when bisphenol A-phosgene copolymer (I) [25971-63-5] containing Cd octanoate [2191-10-8] is aged 24 days in H2O at 82°, its phys. properties and color are unharmed, while I containing com. stabilizers, e.g., organic phosphites, fails in 12 days.

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1977:602627 CAPLUS
DOCUMENT NUMBER: 87:202627
ORIGINAL REFERENCE NO.: 87:32093a,32096a
TITLE: Color-stabilized dichlorobis(hydroxyphenyl)ethylene polycarbonates
INVENTOR(S): Factor, Arnold; Sannes, Keith Norman
PATENT ASSIGNEE(S): General Electric Co., USA
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2709387	A1	19770929	DE 1977-2709387	19770304
IN 146002	A1	19790203	IN 1977-CA284	19770228
CA 1109594	A1	19810922	CA 1977-273071	19770303
NL 7703064	A	19770926	NL 1977-3064	19770321

FR 2345488	A1	19771021	FR 1977-8377		19770321
GB 1568649	A	19800604	GB 1977-11792		19770321
BE 852747	A1	19770718	BE 1977-176007		19770322
JP 52138543	A	19771118	JP 1977-30525		19770322
AU 7723494	A	19780928	AU 1977-23494		19770322
AU 510238	B2	19800619			
PL 102953	B1	19790531	PL 1977-196826		19770322
US 4448727	A	19840515	US 1981-298662		19810902
PRIORITY APPLN. INFO.:			US 1976-668857	A	19760322
			US 1978-947659	A1	19781002

OTHER SOURCE(S): MARPAT 87:202627

AB Di-Ph phosphite (I) [4712-55-4] or a mixture of I, Cd octanoate [2191-10-8], decyl di-Ph phosphite [3287-06-7], and/or 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate [2386-87-0] was added to a polycarbonate (II) [31095-03-1] of 1,1-dichloro-2,2-bis(4-hydroxyphenyl)ethylene and phosgene, optionally containing a bisphenol A polycarbonate [24936-68-3], to prevent discoloration during heating. Thus, II containing 0.15% I was molded to prepare a transparent material which had absorption 0.022 at 425 μ after 5 min at 300°, compared with an absorption of 0.048 for II containing no I.

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1976:106605 CAPLUS
DOCUMENT NUMBER: 84:106605
ORIGINAL REFERENCE NO.: 84:17379a,17382a
TITLE: Heat resistant polycarbonate compositions
PATENT ASSIGNEE(S): General Electric Co., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 49107050	A	19741011	JP 1973-11636		19730130
JP 56025949	B	19810616			
PRIORITY APPLN. INFO.:			JP 1973-11636	A	19730130

AB A heat-resistant polycarbonate composition is prepared, containing aliphatic acid salts and P compds. Thus, a 4:1 blend of bisphenol A-phosgene polymer [25971-63-5] and bisphenol A-phosgene-tetrabromobisphenol A polymer [32844-27-2] containing 0.3% mixture of 4.1 parts phenyl diphenylphosphinite (I) [13360-92-4] and 5.9 parts cadmium hexanoate (II) [2408-86-8] was pelletized at 525°F and then molded at 710°F to give a sheet with improved heat resistance compared with a control without I and II under the same conditions.

L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1970:467483 CAPLUS
DOCUMENT NUMBER: 73:67483
ORIGINAL REFERENCE NO.: 73:11045a,11048a
TITLE: Polyhydroxy diureas
INVENTOR(S): Vogt, Herwart C.
PATENT ASSIGNEE(S): Wyandotte Chemicals Corp.

SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3522304	A	19700728	US 1967-650590	19670703
PRIORITY APPLN. INFO.:			US 1967-650590 A	19670703

AB Polyhydroxy diureas (I) were prepared by treating a primary or secondary alkanolamine with a diisocyanate or the reaction product of phosgene with a primary or secondary diamine. Thus, a solution of 2-methylpiperazine in aqueous NaOH was treated with phosgene to give 2-methylpiperazine-1,4-dicarbonyl chloride, which was then treated with HO(CH2)2NH in THF to give 1,4-bis(2-hydroxyethylcarbamoyl)-2-methylpiperazine. I were chain extended with prepolymers prepared from tolylene diisocyanate and polypropylene glycol in the presence of stannous octanoate to give elastomeric polyurethanes.

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1963:482226 CAPLUS
DOCUMENT NUMBER: 59:82226
ORIGINAL REFERENCE NO.: 59:15264h,15265a-e
TITLE: Syntheses in the lipoic acid series. II. Investigation concerning the synthesis of lipoic acid antagonists 1
AUTHOR(S): Schmidt, Ulrich; Alpes, Heinz; Loewenguth, Jean Claude; Grafen, Paul; Goedde, Heinz Werner
CORPORATE SOURCE: Univ. Freiburg, Germany
SOURCE: Justus Liebigs Annalen der Chemie (1963), 666, 201-7
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. CA 53, 170986. 5-Butyl-1,2-dithiolane-3-carboxylic acid (I), 4-oxa-α-lipoic acid (II), and their amides were prepared as antagonists of α-lipoic acid. I did not inhibit dihydrolipoic acid dehydrogenase, while II and its amide displayed a similar behavior as lipoic acid and lipoamide. Me γ-oxocaprylate (160 g.) in 350 cc. MeOH was reduced in the presence of Raney Ni to 115 g. γ-butylbutyrolactone (III), b10 115-18°, n20D 1.4418. γ-Oxocaprylamide m. 87-8°. Pr (125 g.) was added to 110 g. III and 9 g. red P at 15-20°, another 125 g. Br added at 70°, the mixture kept 3 h. at 80°, freed of Br and HBr by passage of air, and poured into 1 l.absolute EtOH. After several hrs., the alc. was evaporated, the residue dissolved in CHCl3, washed with aqueous NaHCO3 and H2O, and distilled to give 165 g. Et 2,4-dibromooctanoate (IV), b0.01 93-5°, n20D 1.4850. IV (150 g.) was added in 15 min. to 66 g. KOH and 88 g. AcSH in 250 cc. EtOH, the mixture warmed 6 h. at 80°, and worked up to give 87 g. Et 2,4-bis(acetylthio)octanoate (V), b0.02 117-25°, n20D 1.4940. V (85 g.) in 250 cc. MeOH was kept 17 h. with 93.5 g. KOH in a little H2O under N, the mixture evaporated in vacuo, the residue acidified with dilute HCl, evaporated in vacuo, the residue dissolved in MeOH, the mixture, filtered the filtrate treated with dilute KOH to pH 7, 5 cc. 1% FeCl3 added, and O passed through the solution for 20 min. to remove the deep red color. The solution was strongly acidified with dilute

HCl and extracted with CHCl3 to give 14.5 g. I, m. 47-8° (petr. ether). Me2CO (30 g.) and 20 g. ZnCl2 was added to cold αγ,-dimercaptobutyric acid, the mixture saturated with HCl gas, kept 15 h., and worked up to give 54 g. 2,2-dimethyl-1,3-dithiane-4-carboxylic acid, m. 106-7°; Et ester, b0.8 104-5°,n20D 1.5238, reduced with LiAlH4 in Et2O to 2,2-dimethyl-4-hydroxymethyl-1,3-dithiane (VI), b0.001 77-80°, n20D 1.5568. Na (100 mg.) in 3 cc. MeOH was added to 28 g. VI and 12 g. acrylonitrile, the mixture kept several hrs., and worked up to give 32 g. of the 4-(β-cyanoethoxy)methyl analog (VII), b0.01 126-30°, n20D 1.5362. VII (20 g.) and 200 cc. EtOH was saturated with HCl gas to give after 2 days in the cold 18 g. 4-(β-carbethoxyethoxy)methyl analog, b0.01 116-18°, n20D 1.5113, hydrolyzed with alc. KOH to the free acid (VIII), b0.001 140-5°. VIII (9 g.) in 50 cc. MeOH was added to 20 g. HgCl2 in 60 cc. MeOH and 20 cc. H2O, the mixture heated 10 min. on a water bath, filtered, the precipitate washed with MeOH, dissolved in 100 cc. C5H5N, and decomposed with H2S. After 30 min. the mixture was diluted with CHCl3, filtered, the filtrate washed with dilute HCl, and H2O, evaporated, the residue in 20 cc. EtOH warmed with 3.5 g. K2CO3 and 150 cc. H2O, the solution adjusted to pH 7, treated with 2 cc. 1% FeCl3, and dehydrogenated with O to give 3 g. dl-II; benzhydrylamine salt m. 120-1°. II and phosgene-pyridine adduct (Scholtissek) CA 51, 14712a) in THF gave 2,2-dimethyl-4-(β-aminoformylethoxy)methyl-1,3-dithiane (IX), m. 78-9°. IX (3.9 g.) in 20 cc. MeOH was treated with 12 g. HgCl2 in 30 cc. MeOH, stirred 30 min. at 60°, filtered, the residue dried, suspended in 50 cc. C5H5N, treated 2 h. with H2S, filtered, the filtrate diluted with CHCl3, washed with dilute HCl, and dehydrogenated with aqueous KI3 to give 1.6. II amide, m. 80-4°.

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(FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009

L1 5 S CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L2 0 S PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)
L3 0 S PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)
L4 122 S CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
L5 0 S L4 AND PHOSGENE
L6 10 S PHOSGENE (L) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANO

=> s chloroformat# and (pentanoate or hexanoate or octanoate or nonanoate or decanoate)

24059 CHLOROFORMAT#
1964 PENTANOATE
85 PENTANOATES
2021 PENTANOATE
(PENTANOATE OR PENTANOATES)
7084 HEXANOATE
140 HEXANOATES
7168 HEXANOATE
(HEXANOATE OR HEXANOATES)
10872 OCTANOATE
171 OCTANOATES
10950 OCTANOATE

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                (OCTANOATE OR OCTANOATES)
          1879 NONANOATE
            31 NONANOATES
          1898 NONANOATE
                (NONANOATE OR NONANOATES)
          4663 DECANOATE
            68 DECANOATES
          4694 DECANOATE
                (DECANOATE OR DECANOATES)
L7         114 CHLOROFORMAT# AND  (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONA
               NOATE OR DECANOATE)

=> s l7 and hydroxy
        487886 HYDROXY
            12 HYDROXIES
        487897 HYDROXY
                (HYDROXY OR HYDROXIES)
L8          40 L7 AND HYDROXY

=> s l8 and phosgene
         14253 PHOSGENE
            44 PHOSGENES
         14265 PHOSGENE
                (PHOSGENE OR PHOSGENES)
L9           2 L8 AND PHOSGENE

=> d l9 1-2 ibib abs

L9   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2007:793632  CAPLUS
DOCUMENT NUMBER:          147:189176
TITLE:                    Preparation of 2-benzylimidazole derivatives as
                          parasiticides
INVENTOR(S):              Chubb, Nathan Anthony Logan; Cox, Mark Roger;
                          Dauvergne, Jerome Sebastien; Ewin, Richard Andrew;
                          Lauret, Christelle
PATENT ASSIGNEE(S):       Pfizer Inc., USA
SOURCE:                   U.S. Pat. Appl. Publ., 121pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     US 20070167506       A1    20070719    US 2007-619735         20070104
     AU 2007206698        A1    20070726    AU 2007-206698         20070108
     CA 2632771           A1    20070726    CA 2007-2632771        20070108
     WO 2007083207        A1    20070726    WO 2007-IB71           20070108
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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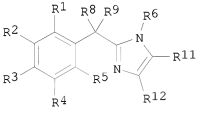
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 1981853	A1	20081022	EP 2007-700025		20070108
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, MK, RS					
US 20080119536	A1	20080522	US 2007-945083		20071126
US 20080125473	A1	20080529	US 2007-945064		20071126
IN 2008DN05605	A	20080926	IN 2008-DN5605		20080627
MX 2008008588	A	20080708	MX 2008-8588		20080630
KR 2008085046	A	20080922	KR 2008-717642		20080718
CN 101370786	A	20090218	CN 2007-80002603		20080718
NO 2008003404	A	20080804	NO 2008-3404		20080804
PRIORITY APPLN. INFO.:			US 2006-760765P	P	20060119
			US 2007-619735	A3	20070104
			WO 2007-IB71	W	20070108

OTHER SOURCE(S): MARPAT 147:189176

GI



I

AB The title compds. [I; R1-R5 = H, cyano, nitro, halo, hydroxy, optionally hydroxylated C1-4 alkyl, (un)substituted C3-6 cycloalkyl, C1-4 alkoxy, C1-4 haloalkyl, C1-4 haloalkoxy, Ph, (un)substituted amino, S(O)nR10; R6 = H, -C0-2 alkylene-R7, -C1-2 alkylene-OR7-C0-2alkylene-C(O)R7, -C1-2 alkylene-OC(O)R7, -C1-2 alkylene-OC(O)OR7, -C0-2 alkylene-C(O)OR7, -C1-2 alkylene-N(H)C(O)R7, -C1-2 alkylene-N(R7)C(O)R7, -C0-2 alkylene-C(O)NHR7, -C0-2 alkylene-C(O)NR15R16, etc., where the C0-2 alkylene or C1-2alkylene may optionally be substituted; R7, R15, R16 = H, C1-8 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-8 cycloalkyl, C1-4 alkylene-(C3-6 cycloalkyl), C1-4 alkylene-C1-4 alkoxy, C1-6 haloalkyl, C0-6 alkylenephenyl, etc.; or NR15R16 = (un)substituted and (un)saturated 3- to 7-membered heterocyclic ring optionally containing ≥1 N, O, S, or SO2; R8, R9 = independently H, each (un)substituted C1-4 alkyl, C1-4 alkoxy, C1-4 haloalkyl, C1-4 haloalkoxy, or C0-4 alkylene-Ph but with the proviso that R8 and R9 are not both hydrogen; or CR8R9 (un)substituted 3- to 6-membered carbocyclic ring; R11, R12 = independently H, halo, cyano, C1-4 alkyl, C1-4 alkoxy, C1-4 haloalkyl, C1-4 haloalkoxy; R10 = H hydroxy, C1-4 alkyl, C1-4 haloalkyl, 4-halophenyl, amino, mono- or di(C1-6 alkyl)amino] or pharmaceutically acceptable salts or prodrugs thereof. These alpha substituted 2-benzyl substituted imidazole compds. are useful for treating infestation of parasites, in particular insects or acarids (ticks or mites), in a host animal. Thus, hydrogenation of

1-benzyl-2-[1-(2,3-dimethylphenyl)vinyl]-1H-imidazole in the presence of Pd(OH)2 in methanol at a pressure of 300 psi and 60° under a hydrogen atmospheric for 18 h gave 2-[1-(2,3-Dimethylphenyl)ethyl]-1H-imidazole (II). II controlled Rhipicephalus sanguineus (brown dog tick) with ED100 of 0.1 mg/cm2 when it was coated on the inner surface of a vial.

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1991:247788 CAPLUS
DOCUMENT NUMBER: 114:247788
ORIGINAL REFERENCE NO.: 114:41865a,41868a
TITLE: Peptide derivatives preparation as retroviral protease inhibitors
INVENTOR(S): Kempf, Dale J.; Plattner, Jacob J.; Norbeck, Daniel W.; Boyd, Steven A.; Baker, William R.; Erickson, John W.; Fung, Anthony K. L.; Crowley, Steven R.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 222 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8910752	A1	19891116	WO 1989-US2055	19890512
W: AU, DK, JP, KR, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 342541	A2	19891123	EP 1989-108590	19890512
EP 342541	A3	19911106		
R: ES, GR				
AU 8935660	A	19891129	AU 1989-35660	19890512
EP 415981	A1	19910313	EP 1989-905856	19890512
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 03504247	T	19910919	JP 1989-506033	19890512
PRIORITY APPLN. INFO.:			US 1988-194678	A2 19880513
			WO 1989-US2055	A 19890512

OTHER SOURCE(S): MARPAT 114:247788
AB Peptide derivs. are prepared as retroviral protease inhibitors. Synthetic processess involved carbodiimide coupling, or coupling in combination with deprotection, and reaction with mixed anhydrides. Thus, N-methyl-1-cyclohexenecarboxamide was treated with BuLi in THF, treated with ClTi(OPr-iso)3, and then Boc-phenylalaninal to give N-methyl-6-[2-(tert-butoxycarbonyl)amino-1-hydroxy-3-phenyl]propyl-1-cyclohexenecarboxamide. This was then deprotected with HCl in dioxane to give N-methyl-6-(2-amino-1-hydroxy-3-phenylpropyl)-1-cyclohexenecarboxamide-HCl (I). I was coupled with Boc-Leu-Asn in the presence of 180-BuO2CCl to give the amide.
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009

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L1            5 S CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L2            0 S PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)
L3            0 S PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)
L4          122 S CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
L5            0 S L4 AND PHOSGENE
L6           10 S PHOSGENE (L)  (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANO
L7          114 S CHLOROFORMAT# AND  (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L8           40 S L7 AND HYDROXY
L9            2 S L8 AND PHOSGENE

=> s (methylene (w) chloride) and phosgne and  (pentanoate or hexanoate or
octanoate or nonanoate or decanoate)
        139397 METHYLENE
           926 METHYLENES
        139946 METHYLENE
                 (METHYLENE OR METHYLENES)
       1275291 CHLORIDE
        170285 CHLORIDES
       1353719 CHLORIDE
                 (CHLORIDE OR CHLORIDES)
         17699 METHYLENE (W) CHLORIDE
             0 PHOSGNE
          1964 PENTANOATE
            85 PENTANOATES
          2021 PENTANOATE
                 (PENTANOATE OR PENTANOATES)
          7084 HEXANOATE
           140 HEXANOATES
          7168 HEXANOATE
                 (HEXANOATE OR HEXANOATES)
         10872 OCTANOATE
           171 OCTANOATES
         10950 OCTANOATE
                 (OCTANOATE OR OCTANOATES)
          1879 NONANOATE
            31 NONANOATES
          1898 NONANOATE
                 (NONANOATE OR NONANOATES)
          4663 DECANOATE
            68 DECANOATES
          4694 DECANOATE
                 (DECANOATE OR DECANOATES)
L10           0 (METHYLENE (W) CHLORIDE) AND PHOSGNE AND  (PENTANOATE OR HEXANOA
                TE OR OCTANOATE OR NONANOATE OR DECANOATE)

=> s (methylene (w) chloride) and phosgene and (hexanoate or octanoate)
        139397 METHYLENE
           926 METHYLENES
        139946 METHYLENE
                 (METHYLENE OR METHYLENES)
       1275291 CHLORIDE
        170285 CHLORIDES
       1353719 CHLORIDE
                 (CHLORIDE OR CHLORIDES)
         17699 METHYLENE (W) CHLORIDE
         14253 PHOSGENE
            44 PHOSGENES
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```
         14265 PHOSGENE
                 (PHOSGENE OR PHOSGENES)
          7084 HEXANOATE
           140 HEXANOATES
          7168 HEXANOATE
                 (HEXANOATE OR HEXANOATES)
         10872 OCTANOATE
           171 OCTANOATES
         10950 OCTANOATE
                 (OCTANOATE OR OCTANOATES)
L11          0 (METHYLENE (W) CHLORIDE) AND PHOSGENE AND (HEXANOATE OR OCTANOAT
               E)

=> s (methylene (w) chloride) and phosgene
        139397 METHYLENE
           926 METHYLENES
        139946 METHYLENE
                 (METHYLENE OR METHYLENES)
       1275291 CHLORIDE
        170285 CHLORIDES
       1353719 CHLORIDE
                 (CHLORIDE OR CHLORIDES)
         17699 METHYLENE (W) CHLORIDE
         14253 PHOSGENE
            44 PHOSGENES
         14265 PHOSGENE
                 (PHOSGENE OR PHOSGENES)
L12        266 (METHYLENE (W) CHLORIDE) AND PHOSGENE

=> s l12 and octanoic acid
         14436 OCTANOIC
       4840181 ACID
       1695509 ACIDS
       5368866 ACID
                 (ACID OR ACIDS)
         14009 OCTANOIC ACID
                 (OCTANOIC(W)ACID)
L13          0 L12 AND OCTANOIC ACID

=> s l12 and (hydroxy (4w) carboxylic (4w) acid)
        487886 HYDROXY
            12 HYDROXIES
        487897 HYDROXY
                 (HYDROXY OR HYDROXIES)
        275447 CARBOXYLIC
            52 CARBOXYLICS
        275468 CARBOXYLIC
                 (CARBOXYLIC OR CARBOXYLICS)
       4840181 ACID
       1695509 ACIDS
       5368866 ACID
                 (ACID OR ACIDS)
          4780 HYDROXY (4W) CARBOXYLIC (4W) ACID
L14          0 L12 AND (HYDROXY (4W) CARBOXYLIC (4W) ACID)

=> s hydroxy (2w) carboxylic (2w) acid
        487886 HYDROXY
```

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           12 HYDROXIES
       487897 HYDROXY
                (HYDROXY OR HYDROXIES)
       275447 CARBOXYLIC
           52 CARBOXYLICS
       275468 CARBOXYLIC
                (CARBOXYLIC OR CARBOXYLICS)
      4840181 ACID
      1695509 ACIDS
      5368866 ACID
                (ACID OR ACIDS)
L15       3277 HYDROXY (2W) CARBOXYLIC (2W) ACID

=> d his

     (FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

     FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009
L1             5 S CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L2             0 S PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)
L3             0 S PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)
L4           122 S CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
L5             0 S L4 AND PHOSGENE
L6            10 S PHOSGENE (L)  (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANO
L7           114 S CHLOROFORMAT# AND  (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L8            40 S L7 AND HYDROXY
L9             2 S L8 AND PHOSGENE
L10            0 S (METHYLENE (W) CHLORIDE) AND PHOSGNE AND  (PENTANOATE OR HEXA
L11            0 S (METHYLENE (W) CHLORIDE) AND PHOSGENE AND (HEXANOATE OR OCTAN
L12          266 S (METHYLENE (W) CHLORIDE) AND PHOSGENE
L13            0 S L12 AND OCTANOIC ACID
L14            0 S L12 AND (HYDROXY (4W) CARBOXYLIC (4W) ACID)
L15         3277 S HYDROXY (2W) CARBOXYLIC (2W) ACID

=> s l12 and l15
L16            0 L12 AND L15

=> s l15 and chloroformate
         24055 CHLOROFORMATE
          1824 CHLOROFORMATES
         24683 CHLOROFORMATE
                 (CHLOROFORMATE OR CHLOROFORMATES)
L17         21 L15 AND CHLOROFORMATE

=> s l17 and diphosgene
           437 DIPHOSGENE
             1 DIPHOSGENES
           437 DIPHOSGENE
                 (DIPHOSGENE OR DIPHOSGENES)
L18            1 L17 AND DIPHOSGENE

=> d l18 ibib abs

L18  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2002:162073  CAPLUS
DOCUMENT NUMBER:          136:355041
TITLE:                    Dynamic Kinetic Resolution via Dual-Function Catalysis
```

	of Modified Cinchona Alkaloids: Asymmetric Synthesis of α- Hydroxy Carboxylic Acids
AUTHOR(S):	Tang, Liang; Deng, Li
CORPORATE SOURCE:	Department of Chemistry, Brandeis University, Waltham, MA, 02454-9110, USA
SOURCE:	Journal of the American Chemical Society (2002), 124(12), 2870-2871 CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:	American Chemical Society
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 136:355041

AB A highly enantioselective catalytic transformation of racemic α-hydroxy acids to optically active α-hydroxy acids is reported. A new procedure was developed for the condensation of racemic α-hydroxy acids with trichloromethyl chloroformate (diphosgene) at room temperature in the presence of activated charcoal to form 5-substituted-1,3-dioxolane-2,4-diones in 90-100% yield. An efficient dynamic kinetic resolution of 5-aryldioxolanediones was realized via a modified Cinchona alkaloid-catalyzed alcoholytic opening of the dioxolanedione ring, generating a variety of optically active α-hydroxy esters in 91-96% ee and 61-85% chemical yield. In this dynamic kinetic resolution, the modified Cinchona alkaloid was found to serve dual catalytic roles, mediating both the rapid racemization of the 5-aryl dioxolanediones and the enantioselective alcoholytic ring opening of the 5-aryl dioxolanediones. Consequently, both enantiomers of the 5-aryl dioxolanediones were converted to highly enantiomerically enriched aromatic α-hydroxy esters in yields (61-85%), far exceeding the maximum of 50% for a normal kinetic resolution This development not only represents an expansion of the scope of asym. acyl-transfer catalysis of synthetic catalysts but also provides a new approach for the development of efficient chemical dynamic kinetic resolns. promoted by a single catalyst. 5-Alkyldioxolanediones were resolved by a conventional but highly enantioselective kinetic resolution to provide α-hydroxy acids and esters in high optical purity and good yields.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009

L1	5	S	CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L2	0	S	PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)
L3	0	S	PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)
L4	122	S	CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
L5	0	S	L4 AND PHOSGENE
L6	10	S	PHOSGENE (L) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANO
L7	114	S	CHLOROFORMAT# AND (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L8	40	S	L7 AND HYDROXY
L9	2	S	L8 AND PHOSGENE
L10	0	S	(METHYLENE (W) CHLORIDE) AND PHOSGNE AND (PENTANOATE OR HEXA
L11	0	S	(METHYLENE (W) CHLORIDE) AND PHOSGENE AND (HEXANOATE OR OCTAN
L12	266	S	(METHYLENE (W) CHLORIDE) AND PHOSGENE

```
L13           0 S L12 AND OCTANOIC ACID
L14           0 S L12 AND (HYDROXY (4W) CARBOXYLIC (4W) ACID)
L15        3277 S HYDROXY (2W) CARBOXYLIC (2W) ACID
L16           0 S L12 AND L15
L17          21 S L15 AND CHLOROFORMATE
L18           1 S L17 AND DIPHOSGENE

=> l15 and phosgene
L15 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l15 and phosgene
         14253 PHOSGENE
            44 PHOSGENES
         14265 PHOSGENE
                 (PHOSGENE OR PHOSGENES)
L19           5 L15 AND PHOSGENE

=> d l19 1-5 ibib abs

L19  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         1968:77776  CAPLUS
DOCUMENT NUMBER:          68:77776
ORIGINAL REFERENCE NO.:   68:14991a,14994a
TITLE:                    Halocarbonyloxycarboxylic acid halides
INVENTOR(S):              Iwakura, Yoshio; Hayashi, Katsumi
PATENT ASSIGNEE(S):       Chisso Corp.
SOURCE:                   Jpn. Tokkyo Koho, 0 pp.
                          CODEN: JAXXAD
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     JP 42013927          B4    19670807    JP                     19650219
AB   The reaction of an hydroxy carboxylic acid
     with phosgene and acid halogenating agent is described.  In an
     example, 114 g. ε-caprolactone is added to 500 ml. H2O containing 40
     g. NaOH, the whole let stand overnight, neutralized with concentrated HCl,
saturated
     with NaCl, and extracted with Et2O.  The extract is dropped into 450 ml. Et2O
     containing 160 g. phosgene which is cooled with ice, the whole
     stirred 2 hrs. more, kept overnight with 180 g. SOCl2, and evaporated, and the
     residue distilled in vacuo to give 115 g. ε-chlorocarbonyloxycaproyl
     chloride, b2 120-1°.  Similarly prepared are
     γ-chlorocarbonyloxybutyryl chloride, b2 85.5-87°;
     chlorocarbonyloxyacetyl chloride, b22 81-2°;
     β-chlorocarbonyloxypropionyl chloride, b8 84-6°; and
     p-chlorocarbonyloxybenzyl chloride, b4 142-5°.

L19  ANSWER 2 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         1965:74710  CAPLUS
DOCUMENT NUMBER:          62:74710
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ORIGINAL REFERENCE NO.: 62:13270d-e
TITLE: High-molecular-weight polycarbonate copolymers
INVENTOR(S): Griehl, Wolfgang; Lueckert, Hans
PATENT ASSIGNEE(S): Inventa A.-G. fuer Forschung und Patentverwertung
SOURCE: 2 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3172873		19650309	US	00000000
GB 1010852			GB	
PRIORITY APPLN. INFO.:			CH	19580308

AB Linear copolymers are prepared by the reaction of esters of aliphatic or alicyclic diols and aromatic p-hydroxy carboxylic acids with a 10-40% excess of COCl2 in an aqueous alkaline medium. Addition of small amts. of organic solvents such as (Cl2CH)2, CH2Cl2, xylene, or CCl4 favor the reaction. Quaternary NH4 compds. or tertiary bases (0.1-8% on the weight of the dihydroxy ester) catalyze the reaction. Thus, 19.2 g. ethylene divanillate was dissolved in 50 g. H2O containing 4.3 g. NaOH. With the solution at 25-7°, 50 g. (Cl2CH)2 and 0.5 g. Et4NBr were added and then 5 g. COCl2 was added during 1 hr. Then COCl2 2.8 and a solution of NaOH 4.8 in H2O 25 g. were added simultaneously to the mixture during 30 min. The mixture was stirred 1 hr. at 30°. The viscous mass formed was separated, washed with H2O and boiling MeOH. The product, m. 170-5°, had a solution viscosity of 1.32 (1% in (Cl2CH)2). The copolymer with ethylene bis(p-hydroxybenzoate), m. 235-40°, had a relative viscosity of 1.28. These polymers are useful for making films and fibers.

L19 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1951:47076 CAPLUS
DOCUMENT NUMBER: 45:47076
ORIGINAL REFERENCE NO.: 45:8033f-g
TITLE: Anhydrocarboxy-α- hydroxy carboxylic acids and anhydrocarboxy - α - mercapto carboxylic acids
INVENTOR(S): Davies, Wm. H.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 650003		19510207	GB 1948-16856	19480623

GI For diagram(s), see printed CA Issue.

AB These compds. are prepared by treating COCl2 with a carboxylic acid which has an α-HO or an α-HS substituent. E.g., ClCOCl + HOCH2CO2H → ClCOCH2CO2H → anhydrocarboxyglycolic acid, O.CH2.CO.O.CO, m. 18°. Mandelic acid 101 in dioxane 400 was run into a solution of COCl2 100 in dioxane 100 parts, the mixture kept 4 days at 15-20°, the solvent removed, the residual oil cyclized by heating 3 hrs. at 60° under a pressure of 20 mm., and the oily product crystallized from

ether to yield anhydrocarboxymandelic acid, m. 55-7°. Similar products are obtained from HSCH2CO2H or lactic acid with COCl2.

L19 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1947:36043 CAPLUS
DOCUMENT NUMBER: 41:36043
ORIGINAL REFERENCE NO.: 41:7162d-i,7163a
TITLE: Improvements in the production of polymeric materials
INVENTOR(S): Mackareth, Frederic J. H.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 588660		19470530	GB 1944-11052	19440609

GI For diagram(s), see printed CA Issue.
AB An improved method is revealed for the preparation of organic materials containing two CH2:C groups per mol. which can be polymerized, without cracking or crazing, to hard, solvent-resistant polymers having some thermoplasticity. One mol. of an allyl or alkyl-substituted allyl ester of an aliphatic hydroxy carboxylic acid is treated with one mol. of phosgene or an anhydride or acid chloride of a dicarboxylic acid of not more than 6 C atoms, to form a half ester or half ester acid chloride having the formula: CH2:CX'.CX''X'''.O.CO.R.O.Z.Y, where X', X'' and X''' may be H or alkyl radicals, R is a bivalent aliphatic hydrocarbon radical, Z is an organic dibasic acid radical of not more than 6 C atoms, and Y may be an OH or Cl radical. The half ester is converted to a half ester acid chloride, which is treated with a second mol. of the allyl or alkyl-substituted allyl ester of the hydroxy carboxylic acid to form a tetraester. The tetraester is polymerized in the presence of catalysts at elevated temps. Thus, 1520 g. glycolic acid was heated on a steam bath with 1500 g. allyl alc. and 500 g. benzene. Water from the esterification was removed as the benzene azeotrope. Vacuum fractional distillation yielded allyl glycolate (I), b2 50°, colorless, completely miscible in water, in 75% yield. I, 350 g., was run into a cooled flask containing 300 g. phosgene in 1 hr., with the mixture being allowed to warm up slowly until the phosgene refluxed. Stirring without cooling was continued 5 hrs. with evolution of HCl, and the mixture was then allowed to stand overnight to complete the reaction. Vacuum fractional distillation gave a 60% yield of allyl glycolate chloroformate (II), b10 90°. II, 90 g., was mixed with 60 g. I, and 39.5 g. pyridine was added in 1 hr., with water cooling. The mixture was extracted with ether and the pyridine hydrochloride removed by filtration. Vacuum fractional distillation of the extract gave 85 g. of bis(allyl glycolate) carbonate (III), b1.2 150°. The light-yellow color of III was removed by treating with SO2 and H2O2, followed by water washing, drying, and redistn. III was polymerized into a hard, colorless, transparent sheet by heating, in a cell of two glass walls separated by a resilient gasket, 15 hrs. at 65° with 5% of its weight of benzoyl peroxide. Similarly, I, with succinic anhydride, gave a slightly viscous liquid, allyl glycolate hydrogen succinate, which treated with thionyl chloride and more I gave essentially bis(allyl glycolate) succinate; lactic acid

with allyl alcohol and benzene gave allyl lactate which, heated 30 hrs. with succinic anhydride at 100° followed by addition of thionyl chloride and more I, produced a viscous liquid, essentially allyl lactate allyl glycolate succinate. Copolymers of the tetraesters with compds. containing one CH2:C group, or a C:C group, may also be prepared

L19 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1944:8292 CAPLUS
DOCUMENT NUMBER: 38:8292
ORIGINAL REFERENCE NO.: 38:1219h-i,1220a-f
TITLE: Intramolecular rearrangements in the aromatic series. I. Rearrangements of aromatic esters of phenylcarbamic acids and the mechanism of the formation of aromatic hydroxy carboxylic acids according to Kolbe-Schmidt
AUTHOR(S): Gershzon, G. I.
SOURCE: Zhurnal Obshchei Khimii (1943), 13, 68-81; in English, 81
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB G. presents evidence for a rearrangement of aromatic esters of phenylcarbamic acid which is an intramol. process occurring under the action of the Na ion; on the basis of data on the rearrangement of aromatic esters of phenylcarbamic acid (anilides of arylcarbonic acids) an explanation of the mechanism of the Kolbe-Schmidt reaction is given. The chlorides of aryl-carbonic acids were prepared as follows: the requisite phenol, benzene, PhNMe2 (slight excess over theory for binding all the HCl formed in the reaction) and phosgene were caused to react at 5-8°, with the latter being used in 20-25% excess; after the mass had crystallized, the excess phosgene was blown out with air and the residual chloride was pure enough for synthetic purposes. The esters were prepared by gradual addition of the ROCOCl to a mixture of aniline, water and calcined soda, with good stirring and cooling to 10-12°; after stirring for 0.5 hr. the mixture was acidified with HCl, filtered and washed with water. The yields were 60-70%. The following esters of phenylcarbamic acid were thus prepd: Ph, m. 123-4° (from xylene); o-tolyl, m. 144-4.5° (from EtOH); 1-naphthyl, m. 176-7° (from xylene and EtOH); 2-naphthyl, m. 158-8.5° (from xylene and EtOH). PhNHCO2Ph (5 g.), 20 cc. dry xylene and 0.63 g. Na were mixed and heated to gentle boiling; the Na slowly dissolved, giving off H, with formation of a precipitate of the Na compound, PhOC-(:NPh)ONa, which was complete in about 1 hr.; the mass was cooled and the Na compound filtered off. Treatment with 5% NaOH yielded diphenylurea and phenol; the same result was obtained with water. The Na compound (with the reaction solvent) heated in sealed tubes to 200° for 1 hr., filtered by suction and the solid treated with dilute NaOH, filtered and weakly acidified by HCl, gave 18-20% salicylanilide, m. 134.5-5° (from petr. ether, then 50% AcOH). o-MeC6H4O2CNHPh treated as above yielded 2 products: (a), 4,3-cresotanilide, insol. in hot benzene, m. 213.6-14°, and (b), 2,3-cresotanilide, soluble in hot benzene, insol. in cold, m. 123.3-3.8°; the yields were 12% and 8%, resp. The former compound was a new substance and was prepared for comparison and structure identification by treating 4,3-cresotic acid with PCl3 in xylene, followed by aniline at 50% then heated to 120°, treated with ice water and HCl, followed by precipitation by addition of water to the EtOH solution of the product;

it m. 212-13° (from 50% EtOH). 1-C10H7CO2NHPh treated with Na as above, yielded the Na compound which, however, suffered the above described rearrangement already under the conditions of synthesis (i. e., about 110°), yielding 1-hydroxy-2-naphthanilide, m. 153.5-4°, in 40% yield. 2-C10H7CO2NHPh, treated with Na in xylene as above, yielded at about 110° (augmented by spontaneous reaction after solution of the Na was completed) 2-hydroxy-1-naphthanilide, m. 171.6-2.2° (from AcOH). The rearrangement apparently occurs by migration of Na to the O atom bound to the ring, followed by transfer of the radical -C(:NPh).O-, to the o-carbon of the ring. On the basis of the data, the Kolbe-Schmidt reaction must go through the generally accepted formation of the Na salt of the arylcarbonic acid followed by a rearrangement of similar type, with the Na atom displacing the -C(:O).O- radical which migrates to the o-position.

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=> d his

     (FILE 'HOME' ENTERED AT 13:35:07 ON 05 JUN 2009)

     FILE 'CAPLUS' ENTERED AT 13:35:21 ON 05 JUN 2009
L1             5 S CHLOROCARBONYL (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L2             0 S PROCESS (L) (CHLOROCARBOLYL (2W) PENTANOATE)
L3             0 S PREPARE (L) (CHLOROCARBONYL (S) PENTANOATE)
L4           122 S CHLORO (S) (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANOATE
L5             0 S L4 AND PHOSGENE
L6            10 S PHOSGENE (L)  (PENTANOATE OR HEXANOATE OR OCTANOATE OR NONANO
L7           114 S CHLOROFORMAT# AND  (PENTANOATE OR HEXANOATE OR OCTANOATE OR N
L8            40 S L7 AND HYDROXY
L9             2 S L8 AND PHOSGENE
L10            0 S (METHYLENE (W) CHLORIDE) AND PHOSGNE AND  (PENTANOATE OR HEXA
L11            0 S (METHYLENE (W) CHLORIDE) AND PHOSGENE AND (HEXANOATE OR OCTAN
L12          266 S (METHYLENE (W) CHLORIDE) AND PHOSGENE
L13            0 S L12 AND OCTANOIC ACID
L14            0 S L12 AND (HYDROXY (4W) CARBOXYLIC (4W) ACID)
L15         3277 S HYDROXY (2W) CARBOXYLIC (2W) ACID
L16            0 S L12 AND L15
L17           21 S L15 AND CHLOROFORMATE
L18            1 S L17 AND DIPHOSGENE
L19            5 S L15 AND PHOSGENE

=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 13:53:11 ON 05 JUN 2009
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